

## REMARKS

Claims 1-39 are currently pending in the application. Claims 1, 23, 34, and 37 have been amended herein.

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The disclosure has been objected to as not defining the term "predetermined weighting factor". It is respectfully submitted that the disclosure adequately describes this term. For example, paragraph 59 states that "the view can be used as a weighting factor. For example, if the search is performed for a matching part number and a matching part number is found, this can be given a high confidence rating that the two items with the same part number belong to the same category." It is thus submitted that the disclosure adequately describes the terms referred to by the Examiner.

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Claims 1-33 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,137,911 (hereinafter referred to as "the '911 patent") to Zhilyaev.

Claim 1 is directed to a method for classifying an item, the item having a plurality of attributes, each attribute being a descriptor of a product, and each attribute having a value, the method comprising: (a) selecting an item to be classified; (b) selecting an attribute of the item from the plurality of attributes, each of the plurality of attributes being defined for the item prior to the selecting of the item; (c) comparing the value of the attribute of the item to a set of possible attribute values, the possible attribute values being associated respectively, with item classifications; (d) selecting at least one item classification for the item based on the comparison; and (e) determining a confidence score for each selected item classification for the item.

It is respectfully submitted that claim 1 is not obvious in view of the '911 patent. The '911 patent is directed to the analysis and classification of documents and other textual entities, as indicated in the first sentence of column 1 of the '911 patent. The analysis and classification is performed by analyzing the text within the document to be classified, and determining a statistical distribution of words and phrases contained within the document as compared with a corpus of text formed by the documents, as indicated in the first sentence of the Abstract. It is

text within the document itself which is analyzed, with the text of the document used to classify the document into various classifications.

The '911 patent contains no teaching or suggestion of selecting an item to be classified and selecting an attribute of the item from the plurality of attributes, each of the plurality of attributes being defined for the item prior to selecting the item. To the contrary, the '911 patent requires that the classification be done for a document, and the text within the document is analyzed to determine the distribution of words and phrases from within the document. Thus, the document of the '911 patent is first selected, analyzed to determine the distribution of words and phrases, and then classified. Since the '911 patent does not teach or suggest a plurality of attributes of an item that are defined prior to selecting the item, the '911 patent also does not teach or suggest comparing the value of the attribute of the item to a set of possible attribute values, the possible attribute values being associated respectively, with item classifications. Furthermore, the '911 patent contains no teaching or suggestion of selecting at least one item classification for the item based on the comparison, or determining a confidence score for each selected item classification for the item. Additionally, the '911 patent contains no suggestion or motivation for a combination of any two or more of the steps of the method as claimed. Based on the foregoing, it is submitted that claim 1 is not anticipated by the '911 patent.

Claims 2-23 are dependent claims that each depend directly or indirectly from independent claim 1. Consequently, each of these claims is at least allowable for the reasons noted with respect to independent claim 1. Each of these claims may also be patentable for other reasons, and the applicants reserve the right to assert any such reasons in the future.

Independent claim 24 is directed to a method for classifying an item, the item being associated with a plurality of descriptive terms, the method comprising: (a) selecting an item to be classified, the item associated with a plurality of descriptive terms defined for the item prior to the selecting of the item; (b) searching a reference list of descriptive terms to find descriptive terms corresponding to the descriptive terms associated with the item, the reference list of descriptive terms including at least one item classification for each descriptive term and a confidence score for each item classification of each descriptive term; (c) compiling the item classifications and associated confidence scores for each found corresponding descriptive term in the reference list to determine a confidence score for each item classification; and (d) ranking the

item classifications for each found descriptive term using the compiled confidence scores. It is respectfully submitted that claim 24 is not obvious in view of the '911 patent.

Similarly as described above with respect to independent claim 1, the '911 patent is directed to classifying a document, with the text from within the document itself used as the basis for classifying the document. The '911 patent contains no teaching or suggestion of selecting an item to be classified, the item associated with a plurality of descriptive terms defined for the item prior to selecting the item. To the contrary, the '911 patent requires that words from within a document be analyzed and then utilized in making a document classification. Consequently, the '911 patent also does not teach or suggest searching a reference list of descriptive terms to find descriptive terms corresponding to the descriptive terms associated with the item, the reference list of descriptive terms including at least one item classification for each descriptive term and a confidence score for each item classification of each descriptive term, as required by claim 24. The '911 patent also does not teach or suggest compiling the item classifications and associated confidence scores for each found corresponding descriptive term in the reference list to determine a confidence score for each item classification. The '911 patent contains no teaching or suggestion of ranking the item classifications for each found descriptive term using the compiled confidence scores. Furthermore, the '911 patent contains no suggestion or motivation for combining any two or more of the steps of the method as claimed. Based on the foregoing, it is submitted that claim 24 is not obvious over the '911 patent.

Claims 25-33 are dependent claims that each depend from independent claim 24. Consequently, each of these claims is at least allowable for the reasons noted with respect to independent claim 24. Each of these claims may also be patentable for other reasons, and the applicants reserve the right to assert any such reasons in the future.

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Claims 34-39 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the '911 patent in view of U.S. Patent No. 6,012,053 (hereinafter referred to as "the '053 patent") to Pant et al.

Independent claim 34 is directed to a machine-readable medium having stored thereon data representing sequences of instructions which, when executed by a machine, cause the

machine to perform operations comprising: (a) selecting an item to be classified; (b) selecting an attribute of an item, the item having a plurality of attributes, each attribute having a value and a predetermined weighting factor associated therewith, the plurality of attributes being defined prior to the selecting of the item; (c) comparing the value of the selected attribute of the item to a set of possible attribute values, the possible attribute values being associated respectively, with item classifications; (d) selecting at least one item classification for the item based on the comparison; and (e) determining a confidence score for each selected item classification for the item based on at least the weighting factor associated with the selected attribute. It is respectfully submitted that claim 34 is not obvious over the 911 patent in view of the '053 patent.

It is respectfully submitted that the '911 patent and the '053 patent, alone or in combination, do not teach or suggest the invention set forth in claim 34. The '911 patent, as discussed above, is directed to the classification of documents through statistical analysis of words and phrases contained therein against words and phrases of previously classified documents. The '053 patent is directed to a traditional search engine, where a user, prior to initiating a search, may select relevance factors. The results of the search are ranked according to the relevance factors, with the ranked results output to the user.

The '911 patent in view of the '053 patent contain no teaching or suggestion of selecting an item to be classified, and selecting an attribute of an item, the item having a plurality of attributes, each attribute having a value and a predetermined weighting factor associated therewith, the plurality of attributes being defined prior to selecting the item. To the contrary, the '911 patent analyzes a document to be classified and determines words or phrases which will be compared to the statistical distribution for various classifications. The '053 patent ranks the output of a search according to a set of relevance factors. Since the '911 patent and the '053 patent, alone or in combination, do not teach or suggest selecting an item to be classified and selecting an attribute of the item, the item having a plurality of attributes, each attribute having a value and a predetermined weighting factor associated therewith, the plurality of attributes being defined prior to selecting the item, the cited references also do not teach or suggest determining a confidence score for each selected item classification for the item based on at least the weighting factor associated with the selected attribute. The cited references also do not teach or suggest comparing the value of the selected attribute of the item to a set of possible attribute values, the

possible attribute values being associated respectively, with item classifications. Furthermore, the cited references contain no teaching or suggestion of selecting at least one item classification for the item based on the comparison. Additionally, the cited references contain no teaching or motivation to combine any two or more of the steps as claimed. Based on the foregoing, it is submitted that claim 34 is not obvious over the '911 patent in view of the '053 patent.

Claims 35-36 are dependent claims that each depend from independent claim 34. Consequently, each of these claims is at least allowable for the reasons noted with respect to independent claim 34. Each of these claims may also be patentable for other reasons, and the applicants reserve the right to assert any such reasons in the future.

Independent claim 37 is directed to an apparatus for classifying an item, the item having a plurality of attributes, each attribute having a value and a predetermined weighting factor associated therewith, the apparatus comprising: (a) a classification knowledge database containing a plurality of values, each associated with at least one category; and (b) a search engine to select an attribute of the item, to compare the value of the selected attribute of the item to a set of possible attribute values of the classification knowledge database, to select at least one item classification for the item based on the comparison, and to determine a confidence score for each selected item classification for the item based on at least the weighting factor associated with the selected attribute, wherein the attributes of the item are defined prior to selecting the item for classification.

It is respectfully submitted that claim 37 is not obvious over the '911 patent in view of the '053 patent. Similarly as discussed above with respect to claim 34, the '911 patent is directed to the classification of documents through statistical analysis of words and phrases contained therein against words and phrases of previously classified documents. The '911 patent analyzes a document to be classified and then determines words or phrases which will be compared to the statistical distribution for various classifications. The '053 patent ranks the output of a search according to a set of relevance factors. The '911 patent and the '053 patent, alone or in combination, do not teach or suggest a search engine to select an attribute of an item, to compare the value of the selected attribute of the item to a set of possible attribute values of a classification knowledge database, to select at least one item classification for the item based on the comparison, and to determine a confidence score for each selected item classification for the

item based on at least the weighting factor associated with the selected attribute, wherein the attributes of the item are defined prior to selecting the item for classification. The cited references also do not teach or suggest determining a confidence score for each selected item classification for the item based on at least the weighting factor associated with the selected attribute. The cited references also do not teach or suggest a classification knowledge database containing a plurality of values, each associated with at least one category. Based on the foregoing, it is submitted that claim 37 is not obvious over the '911 patent in view of the '053 patent.

Claims 38-39 are dependent claims that each depend from independent claim 37. Consequently, each of these claims is at least allowable for the reasons noted with respect to independent claim 37. Each of these claims may also be patentable for other reasons, and the applicants reserve the right to assert any such reasons in the future.

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No fees are believed to be due with this response. In the event any such fees are due, please debit Deposit Account 08-2623.

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The application now appearing to be in form for allowance, reconsideration and allowance thereof is respectfully requested.

Respectfully submitted,

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